

**MS MIS CERTIFICATES (12 CREDIT HOURS)**

PROJECT MANAGEMENT				
Course #	Course Name	Grade	Cr	Offered
<b>PREREQUISITE COURSES (9 HRS)</b>				
ISQA 3900	Web App Development			All
ISQA 8030	Information Systems/Ethics			Fall
ISQA 8040	Overview of Sys Devel			Fall/Spr
<b>REQUIRED COURSES (9 HRS)</b>				
ISQA 8210	Mgmt of Software Devel			Fall/Spr
ISQA 8810	IT Project Fundamentals			Fall
ISQA 8820	Project Risk Mgmt			Spr
<b>ELECTIVE COURSES (3 HRS)</b>				
ISQA 8196	Proc Re-Eng w/IT			Spr
ISQA 8220	Adv Sys Analysis/Design			Fall/Spr
ISQA 8420	Managing the IS Function			Sum/Fall
ISQA 8080	Seminar in MIS			
ISQA 8086	Special Topics: ISQA			
ISQA 8900	Independent Research			
Remaining:	12	Compl:	0	

SYSTEMS ANALYSIS/DESIGN				
Course #	Course Name	Grade	Cr	Offered
<b>PREREQUISITE COURSES (12 HRS)</b>				
ISQA 3900	Web App Development			All
ISQA 8030	Information Systems/Ethics			Fall
ISQA 8040	Overview of Sys Devel			Fall/Spr
<b>REQUIRED COURSES (9 HRS)</b>				
ISQA 8210	Mgmt of Software Devel			Fall/Spr
ISQA 8220	Adv Sys Analysis/Design			Fall/Spr
ISQA 8410	Database Management			Spr/Sum
<b>ELECTIVE COURSES (3 HRS)</b>				
ISQA 8420	Managing the IS Function			Sum/Fall
ISQA 8106	Architecture/Organizations			Fall
ISQA 8080	Seminar in MIS			
ISQA 8086	Special Topics: ISQA			
ISQA 8900	Independent Research			
Remaining:	12	Compl:	0	

DATA ANALYTICS (15 CREDIT HOURS)				
Course #	Course Name	Grade	Cr	Offered
<b>PREREQUISITE COURSES (9 HRS)</b>				
CIST 2500	Applied Statistics for IS&T			All
ISQA 8030	Information Systems/Ethics			Fall
ISQA 3310	Mng DB Environment			All
<b>DATA ENGINEERING (3 HRS - ISQA)</b>				
ISQA 8016	Business Intelligence			Spr
ISQA 8206	Info/Data Quality Mgmt			Fall
ISQA 8450	NOSQL/Big Data Tech			Sum
ISQA 8460	IOT, Big Data & the Cloud			Spr
ISQA 8600	Data to Decisions			Fall
ISQA 8700	Data Mining: Theory/Prac			Spr
CSCI 8350	Data Warehousing/Mining			Fall Even Yrs
<b>DATA ANALYTICS (3 HRS - ISQA)</b>				
ISQA 8156	Adv Stat Methods for IT			Fall
ISQA 8340	App Regression Analysis			Fall
ISQA 8700	Data Mining: Theory/Prac			Spr
ISQA 8720	Applied Machine Learning			Fall
ISQA 8736	Decision Support Systems			Fall
ISQA 8160	App. Dist. Free Statistics			
ISQA 9120	App Experimental Des/Anal			OD
ISQA 9130	Multivariate Data Analysis			Fall
CSCI 8156	Graph Theory & App			Spr
CSCI 8360	Machine Learning for Text			
ECON 8310	Business Forecasting			Fall
CSCI 8306	Deterministic Ops Research			Fall
<b>DATA VISUALIZATION (3 HRS - ISQA)</b>				
ISQA 8525	Graphical UI Design			Spr
ISQA 8750	Storytelling with Data			Fall
GEOG 8535	Cartography & GIS			Fall/Spr
<b>ELECTIVES (6 HRS)</b>				

INFORMATION ASSURANCE				
Course #	Course Name	Grade	Cr	Offered
<b>PREREQUISITE COURSES (9 HRS)</b>				
ISQA 8030	Information Systems/Ethics			Fall
ISQA 8040	Overview of Sys Devel			Fall/Spr
<b>REQUIRED COURSES (9 HRS)</b>				
ISQA 8546	Computer Security Mgmt			Fall/Spr
ISQA 8570	Info Security/Policy/Ethics			OD
ISQA 8580	Sec Risk Mgmt/Assessment			OD
<b>ELECTIVE COURSES (3 HRS)</b>				
ISQA 8560	Info Warfare/Security			Sum
ISQA 8080	Seminar in MIS			
ISQA 8086	Special Topics: ISQA			
ISQA 8900	Independent Research			

Data Management (15 CREDIT HOURS)				
Course #	Course Name	Grade	Cr	Offered
<b>PREREQUISITE COURSES (9 HRS)</b>				
CIST 1600/CIST	Practical Scripting			All
ISQA 3310	Mng DB Environment			All
<b>Required Courses (9 HRS)</b>				
ISQA 8306	Database Administration			Spr
ISQA 8410	Data Management			Fall
ISQA 8450	NOSQL/Big Data Tech			Sum
<b>Electives (6 HRS)</b>				
ISQA 8016	Business Intelligence			Spr
ISQA 8206	Info/Data Quality Mgmt			Fall
ISQA 8380	Enter. Arch. and System Int			Sp/Sum
ISQA 8700	Data Mining: Theory/Prac			Spr

Student Signature

Adviser Signature

Graduation Program Committee Chair Signature

MIS GRADUATE CERTIFICATE  
Plan of Study